

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

2661

Applicant: Alexander A. Maltsev et al.

Title: SYSTEM AND METHOD FOR ADAPTIVE PHASE COMPENSATION OF OFDM SIGNALS

Docket No.: 884.782US1

Filed: September 30, 2003

Examiner: Unknown



Serial No.: 10/675215

Due Date: N/A

Group Art Unit: 2661

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- ☒ A return postcard.
- ☒ An Information Disclosure Statement (2 pgs.), Form 1449 (1 pg.), and copies of 8 cited documents (Copies of US Patent/Publication documents not provided; application filed after June 30, 2003).
- ☒ Copy of International Search Report in PCT/RU03/00125, mailed February 16, 2004 (4 pages).

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
Customer Number 21186

By: Ann M. McCrackin
Atty: Ann M. McCrackin
Reg. No. 42,858

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 19 day of March, 2004.

KACIA LEE
Name

Kacia Lee
Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
(GENERAL)

S/N 10/675215

PATENT

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Applicant:	Alexander A. Maltsev et al.	Examiner:	Unknown
Serial No.:	10/675215	Group Art Unit:	2661
Filed:	September 30, 2003	Docket:	884.782US1
Title:	SYSTEM AND METHOD FOR ADAPTIVE PHASE COMPENSATION OF OFDM SIGNALS		
Assignee:	Intel Corporation	Customer No:	21186

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(c)(1) and 37 C.F.R. §1.97(e)(1), Applicants state that certain of the items of information contained in the Information Disclosure Statement were first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement. A copy of the relevant International Search Report in PCT/RU03/00125, mailed February 16, 2004, is also enclosed.

The present application is either a U.S. national patent application filed after June 30, 2003 or an international application that entered the national stage under 35 U.S.C. § 371 after June 30, 2003. Thus, Applicant believes that the U.S. Patent & Trademark Office has waived the requirement under 37 C.F.R. 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication. The waiver is provided in a pre-OG notice from the U.S. Patent & Trademark Office entitled "Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003" and dated July 11, 2003. Applicant acknowledges the requirement to submit

INFORMATION DISCLOSURE STATEMENT

Serial No : 10/675215

Filing Date: September 30, 2003

Title: SYSTEM AND METHOD FOR ADAPTIVE PHASE COMPENSATION OF OFDM SIGNALS

Assignee: Intel Corporation

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copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

ALEXANDER A. MALTSEV ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
Attorneys for Intel Corporation
P.O. Box 2938
Minneapolis, Minnesota 55402
(612) 349-9592

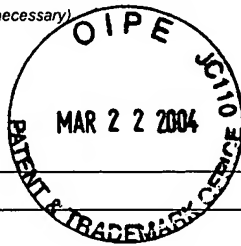
Date March 19, 2004 By Ann M. McCrackin
Ann M. McCrackin
Reg. No. 42,858

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KACIA LEE
Name

Kacia Lee
Signature

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Complete if Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Application Number</td> <td>10/675215</td> </tr> <tr> <td>Filing Date</td> <td>September 30, 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Maltsev, Alexander</td> </tr> <tr> <td>Group Art Unit</td> <td>2661</td> </tr> <tr> <td>Examiner Name</td> <td>Unknown</td> </tr> </table>	Application Number	10/675215	Filing Date	September 30, 2003	First Named Inventor	Maltsev, Alexander	Group Art Unit	2661	Examiner Name	Unknown
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Group Art Unit	2661										
Examiner Name	Unknown										
Sheet 1 of 1	Attorney Docket No: 884.782US1										



US PATENT DOCUMENTS						
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	US-2002/0159533-A1	10/31/2002	Crawford, J. A.	375	260	08/21/2001
	US-5,652,772	07/29/1997	Isaksson, Mikael , et al.	375	367	01/22/1996
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	US-6,363,128	03/26/2002	Isaksson, Mikael , et al.	375	355	06/23/1999

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T ²

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		CHEN, BOR-SEN, et al., "Frequency Offset Estimation in an OFDM System", <u>2001 IEEE Third Workshop on Signal Processing Advances, Wireless Communications 2001</u> , (2001), 150-153	
		DACCA, M. R., et al., "Frequency Offset Tracking in OFDM Based on Multicarrier PLL", <u>21st Century Military Communications Conference Proceedings, Vol. 2</u> , (2000), 912-916	
		LARSSON, ERIK G., et al., "Joint symbol timing and channel estimation for OFDM based WLANs", <u>IEEE Communications Letters, Vol. 5, No. 8</u> , (August 2001), 325-327	
		LI, JIAN, et al., "Carrier Frequency Offset Estimation for IFDM-Based WLANs", <u>IEEE Signal Processing Letters, Vol. 8, No. 3</u> , (March 2001), 80-82	
		MATHEUS, KIRSTEN, et al., "Parameter Optimization for Decision Directed Frequency Tracking for Coherent OFDM", <u>Global Telecommunications Conference, 2000, IDDD Vol. 3</u> , (2000), 1402-1406	
		MORELLI, MICHELE, et al., "Carrier-Frequency Estimation for Transmission over Selective Channels", <u>IEEE Transactions on Communications, Vol. 48, No. 9</u> , (September 2000), 1580-1589	
		PERETS, R. , et al., "A New Phase and Frequency Offset Estimation Algorithm for OFDM Systems Applying Kalman Filter", <u>22nd Convention of Electrical and Electronics Engineers in Israel, IEEE, XP010631136</u> , (12/01/2002), 300-302	
		SCHMIDL, TIMOTHY M., "Robust Frequency and Timing Synchronization for OFDM", <u>IEEE Transactions on Communications, Vol. 45, No. 12</u> , (Dec. 1997), 1613-1621	

EXAMINER

DATE CONSIDERED